DeLaval Milk Cooling Systems

Preserving milk quality effectively and efficiently

DeLaval compact water chiller

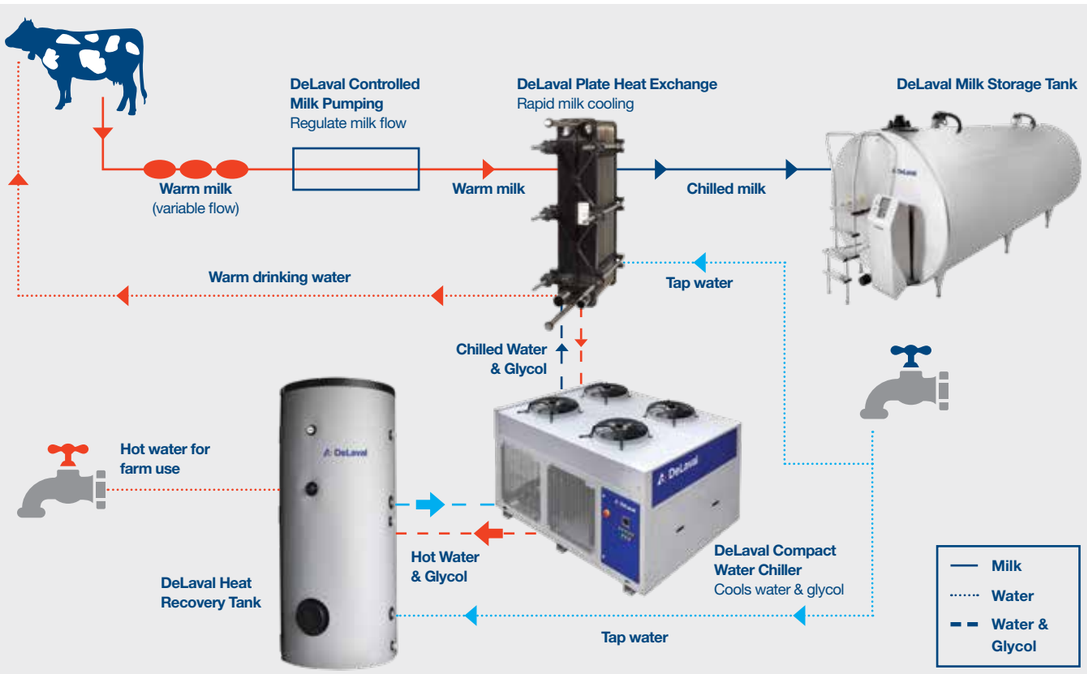
Cool it! And keep milk quality at its peak

In order to receive premium milk rates, you need to deliver the highest quality milk to the dairy.

There are many factors involved in this: feed quality, daily routines and herd health, to name a few, but once milk leaves the teat, it's left to the cooling process to safeguard milk quality.

If you rely on the cooling tank alone to chill and store your milk, you could encounter problems, particularly if your herd size or yield averages have increased over time.

DeLaval complete milk cooling system



DeLaval milk pump FMP

Model	Max Flow	Max Head
FMP55 0.55kW	4m³/h	12m
FMP110 1.1kW	13m³/h	15m
FMP220 2.2kW	33m³/h	25m

DeLaval Plate Heat Exchangers

Your cost-saving investment

Pre-cooling reduces the cooling load and thus the energy required. Associated costs, are also reduced. A correctly sized DeLaval plate heat exchanger package can save you up to 60 percent of your refrigeration energy costs.

Stainless Frame Heat Exchanger - Available on request.

Model	M6 Range	BM Range
Minimun Flow (l/h)	3000	1000
Maximum Flow (l/h)	16000	5000
Design Pressure (bar)	10	4
Frame (Painted)	Mild Steel	Aluminium
Plates	SS316	SS316

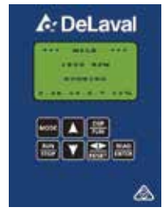
DeLaval milk pump controller RMP200

Constant Flo Technology

This mode of control is developed exclusively for DeLaval Oceania.

"Constant Flo" strives to keep milk flow low and constant allowing our heat exchanger and Compact Water Chiller to work efficiently.

Benefits includes reduction in electricity cost, cooling milk instantly for best quality.



Did you know

Plate heat exchangers

2:1 water to milk ratio is only a guide. Lower water ratio can be used to maximising your pre-cooling water availability. At DeLaval, we can design the heat exchanger and cooling system according to your individual needs.

"In 2013 we put in the DeLaval Compact Water Chiller when we upgraded the shed. We weren't going to, but when you're building a new shed it's the time to do these things if you can. One thing I thought, is it initially would cost us lots of money. But every day when we look at the temperature and its 4½ degrees when we finish milking and the water is so much hotter going in to the cylinder at 60 degrees... It is one of those things you do and you don't regret it."

PHILL NEAME, SOUTH OTAGO

DeLaval compact water chiller range

CWC15-A, CWC30-A, CWC60-A, CWC90-A, CWC120-A

DeLaval Cooling Performance

Cooling is a major part of our assortment and our chillers have been serving farmers over the past few years in helping cool milk instantly, maintaining it's freshness and quality.

It's all about saving you money!

DeLaval compact water chillers are designed with energy efficient scroll compressors, electronic controlled fans, built in heat recovery and more.

Your production in mind

At DeLaval, we know milk cooling cannnot stop. With this in mind, we designed our chillers to have

- An additional pump for peace of mind
- Two compressor to have 50% capacity if one fails

New features and benefits

Glycol Detection

- Added Safety
- High Level Alarm
- Low Level Alarm

Remote Access

- Easy troubleshooting
- Live monitoring
- Data Logging

Built in Heat Recovery

- Free warm water
- Reduces energy cost

"Last year we upgraded to a DeLaval chiller system and I've been most impressed. It has certainly met all of the claims that DeLaval said it would; it probably exceeded them. There has been a reduction in power usage, primarily because of this machine. But, really the big improvement is getting the milk to the silo at 6.5 degrees. It doesn't seem to vary much from that and that is the setting we've got it on. If the dairy company reduces that in a couple of years, I'm sure this machine will do that. We aim to produce a quality product and DeLaval fits that."

LEX MORRIS, SOUTH OTAGO

Did you know

DeLaval CWC-A chillers have pump backup to give you a peace of mind for protection from failure.

DeLaval Compact Water Chiller CWC30-A

Unique TWIN Circuit capacity

Our CWC30-A have the capability to have two separate 15kW circuits. This allows you to have two deep cooling circuit, maximising performance and energy consumption.

Model	CWC30-A / 3 x 400V 50Hz
Capacity at 38°C	30 kW
Milk Flow, ΔT 6°C*	3600 l/h
Milk Flow, ΔT 8°C*	2700 l/h
Milk Flow, ΔT 10°C*	2200 l/h
Weight	700 kg
Length	1.95 m
Width	1.24 m
Height	2.20 m
Refrigerant	R410A
Nominal Current	43 Amps
Running Current*	24 Amps

*Estimate Only

DeLaval Compact Water Chiller CWC60-A

Model	CWC60-A / 3 x 400V 50Hz
Capacity at 38°C	60 kW
Milk Flow, ΔT 6°C*	7200 l/h
Milk Flow, ΔT 8°C*	5400 l/h
Milk Flow, ΔT 10°C*	4300 l/h
Weight	900 kg
Length	3 m
Width	1.7 m
Height	2.0 m
Refrigerant	R410A
Nominal Current	77 Amps
Running Current*	55 Amps

*Estimate Only

DeLaval Compact Water Chiller CWC15-A

Model	CWC15-A / 3 x 400V 50Hz
Capacity at 38°C	15 kW
Milk Flow, ΔT 6°C*	1800 l/h
Milk Flow, ΔT 8°C*	1400 l/h
Milk Flow, ΔT 10°C*	1000 l/h
Weight	425 kg
Length	1.95 m
Width	1.24 m
Height	1.14 m
Refrigerant	R410A
Nominal Current	34 Amps
Running Current*	14 Amps

*Estimate Only

DeLaval Compact Water Chiller CWC90-A

Model	CWC90-A / 3 x 400V 50Hz
Capacity at 38°C	90 kW
Milk Flow, ΔT 6°C*	11000 l/h
Milk Flow, ΔT 8°C*	8100 l/h
Milk Flow, ΔT 10°C*	6500 l/h
Weight	1500 kg
Length	3.0 m
Width	2.2 m
Height	2.0 m
Refrigerant	R410A
Nominal Current	135 Amps
Running Current*	92 Amps

*Estimate Only

DeLaval Compact Water Chiller CWC120-A

Model	CWC120-A / 3 x 400V 50Hz
Capacity at 38°C	120 kW
Milk Flow, ΔT 6°C*	14000 l/h
Milk Flow, ΔT 8°C*	11000 l/h
Milk Flow, ΔT 10°C*	8600 l/h
Weight	1680 kg
Length	3.0 m
Width	2.2 m
Height	2.0 m
Refrigerant	R410A
Nominal Current	160 Amps
Running Current*	116 Amps

*Estimate Only

DeLaval tank range

Milk cooling and storage at its best

Safeguard your milk quality from teat to tank.

At DeLaval, we know the importance of safeguarding milk quality once it has left the cows teats. To ensure your milk retains its quality, DeLaval has developed a premium performance range of cooling tanks – protecting your most valuable asset.

DeLaval Heat Recovery Storage Vessel HRS

DeLaval heat recovery system HRS can produce 0.7 litres of warm water (53°C) from every litre of warm milk (35°C).

Enamel layer inner wall and foam insulation
Minimises heat loss and corrosion protection

Protection for your investment
DeLaval storage vessel is equipped with tubular heat exchanger for water/glycol solution. This creates a double barrier protecting your chiller.

*Picture shows DXCEM range

DeLaval Closed Tank Assortment

Oval Shape
- Rapid Cooling
- Maximum cooling surface
- Efficient use of refrigeration investment

Cleaning Unit T300
Initiates, controls and checks the tank cleaning and milk cooling, providing farmers comfort, safety and quality control.
- Direct to Drain principle
- Short cleaning cycle
- Reduction in hot and cold water

Optimised cleaning through rotating nozzle
The cleaning of the tank is a key aspect of the cooling ensuring top quality milk, over and over again.

To get to all the corners and complete the entire inner surface, DeLaval has integrated the cleaning nozzle in the rotating blades, ensuring a complete and thorough cleaning of the inside of the tank.

DeLaval DX3S Milk Tank

Advance Agitator Design
Milk splashing at low volume and foaming can damage milk quality.

Gentle Mixing
Splashing at low volumes, which can damage milk quality, is prevented thanks to automatically controlled two-speed agitation.

T Cleaning Sprayer
The cleaning of the tank is a key aspect of the cooling ensuring top quality milk, over and over again.

To get to all the corners and complete the entire inner surface, DeLaval has integrated the cleaning nozzle in the rotating blades, ensuring a complete and thorough cleaning of the inside of the tank.

Did you know

DeLaval Tank insulation is never less than 50mm on tank walls

How is this manufactured?

The polyurethane coating process is controlled by an infrared camera to achieve highly even insulation.

Your Benefits – Lower Running Costs
- Best thermal protection
- Prolong lifetime of compressor
- Milk kept cooled with no electricity
- Reduction in energy cost

DeLaval Chiller Glycol
- MPI Approved
- Manufactures by DeLaval New Zealand
- Available in 20 L or 200 L

Chiller built in glycol tank
Insulated compact glycol tanks reduced energy losses through warmer months.

Efficient Polyurethane foaming technology (DeLaval Closed Tank Assortment & Silo Tank)

Advantages
- Reduces heat gained from hot ambient air temperatures
- Avoids frequent start/stop of compressors

Benefits
- Milk kept cooled for several hours with no power
- Increase compressor lifetime

We live milk

delaval.com

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